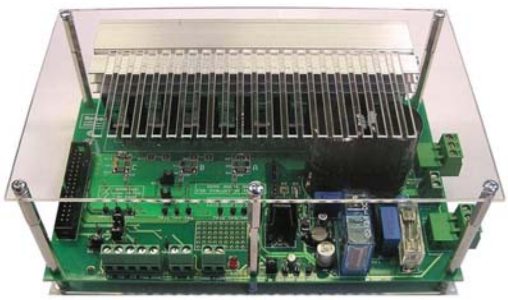
STEVAL-IHM023V1

1 kW 3-phase motor control demonstration board based on the L6390 drivers and STGP10NC60KD IGBT

Data brief

Features

- Complete solution of 1 kW power inverter
- Single phase connecting - supply AC voltage from 90 VAC to 285 VAC
- Direct DC line input up to 400 VDC
- Possibility to use wide range of HV motors or LV motors with BEMF sensing
- Input inrush limiter with bypassing relay
- Brake feature with overvoltage comparator
- Tacho input, hall sensor or encoder input feature
- Overtemperature and overcurrent hardware protection
- Compact, safety and fully evaluated design
- RoHS Compliant



STEVAL-IHM023V1

AM05056v1

Description

The STEVAL-IHM023V1 is a demonstration board designed to implement general purpose low power 3-phase inverter for 3-phase asynchronous motors, bi-phase AC motors or PMAC motors up to 1000 W.
It is fully equipped and convenient for evaluating customers solution in applications like: drum motor control for washing machine, power white goods application, medical beds, water pump for home appliance white goods, transfer pumps for waste sludge – sewerage plants and high efficiency transfer pumps for outlet condensation water in gas furnace application.

1 Schematic circuits

Figure 1. Power supply & control circuits

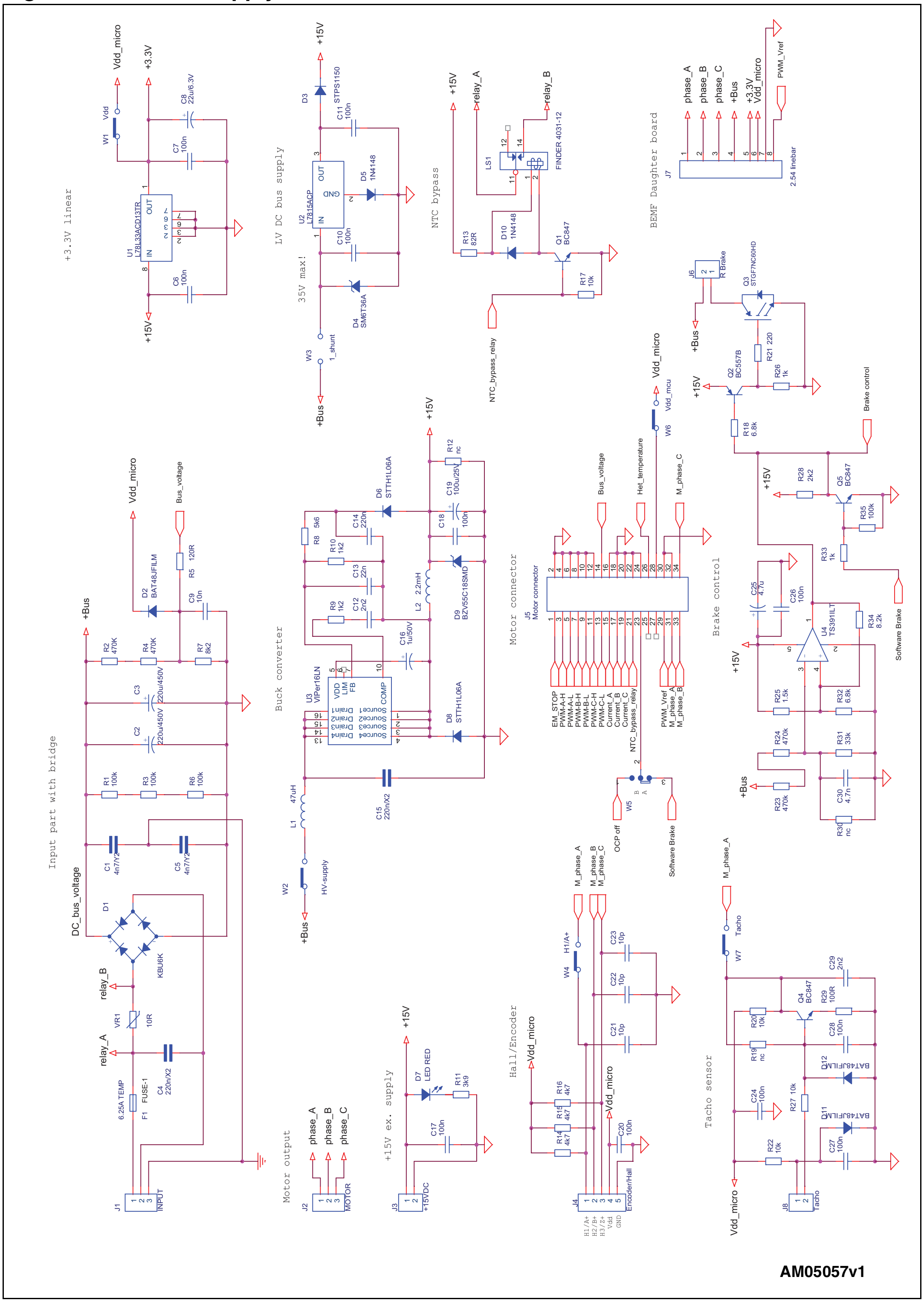
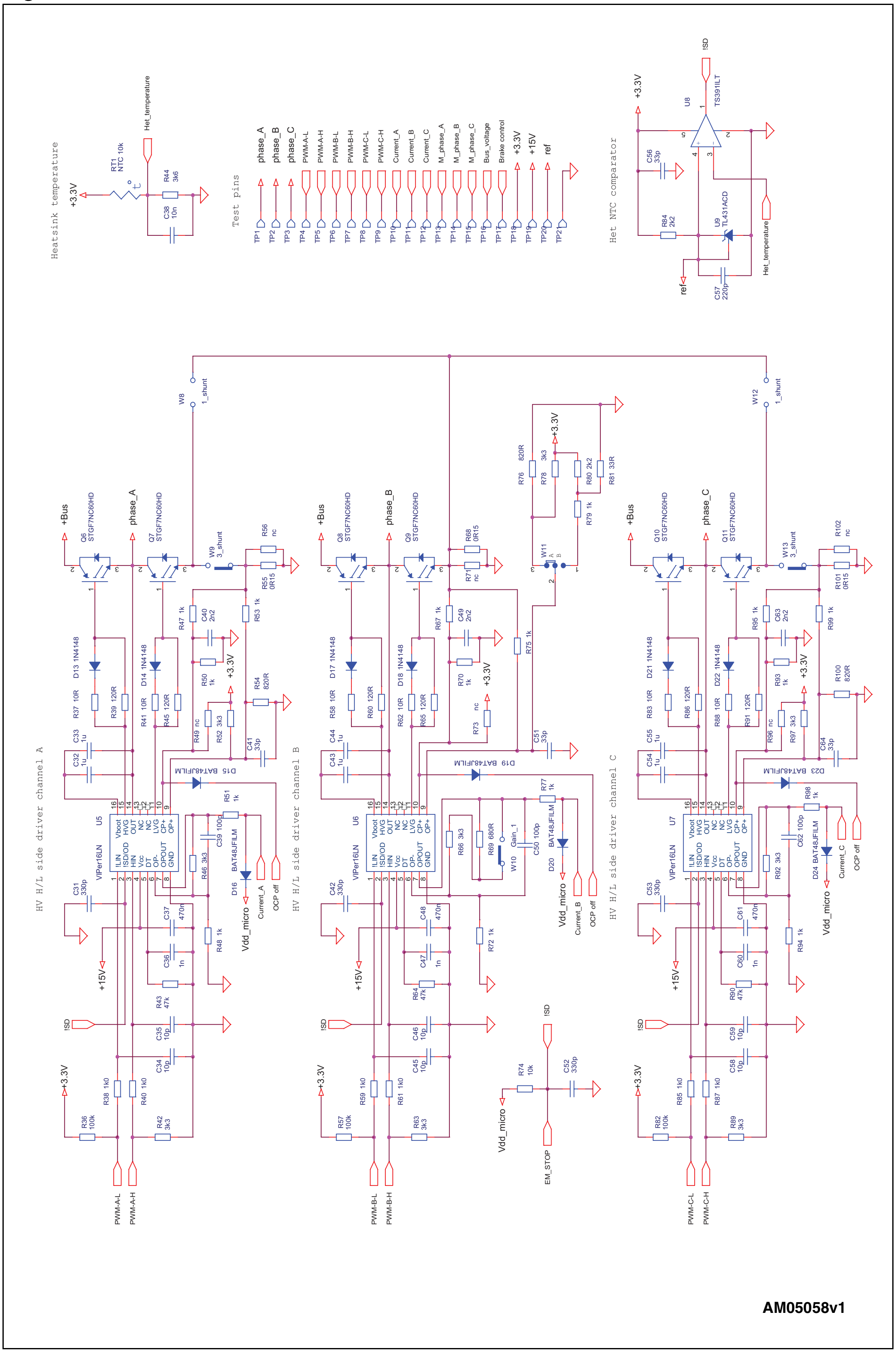


Figure 2. HV driver channels



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
16-Jul-2009	1	Initial release.